

REMARKS***Claim Rejections – 35 U.S.C § 112***

The prior remarks are incorporated and reasserted herein.

Claim Rejections Based Upon Prior Art

The examiner rejected claims 65-69, 75-79, and 81 under 35 U.S.C. § 102(b) as being anticipated by Polansky (US 3,304,557). In the alternative, the examiner rejected the aforementioned claims under 35 U.S.C. § 103(a) as being obvious over Polansky as evidenced by Hammerslag et al. (US 4,921,482) or Penner et al. (US 6,416,474) or Noland (US 4,201,035). It is respectfully submitted that Polansky's picks are not windings.

In a related application (now U.S. Patent 6,740,111), the Board of Patent Appeals and Interferences (BPAI) addressed the issue of what constitutes a winding:

There appears to be no dispute that a "winding" is a turn of wire or rope would around an object, a spiral, for the appellant has so asserted on page 13 of the specification and the examiner has offered such a definition on page 7 of the Answer. The appellant's specification explains the construction of the clamping rings in a manner that conforms with this definition, for it describes them as being formed by "wrapping a single length of wire around the mandrel" to form a number of coils (page 7). Based upon this evidence, it is our opinion that the designation of a wire as a "winding" in the present case would be interpreted by one of ordinary skill in the art to be a structural limitation requiring that the annular wire ring be formed by winding a wire in a spiral manner about an object such as a core. In this regard, the appellant argues that the broadest reasonable interpretation of a winding does not include a closed ring, which is what he believes is disclosed in Inoue '179.

See Appeal No. 2003-1502, *Decision on Appeal*, page 4.

In contrast, Polansky's picks are part of a flat woven fabric that is shaped into a tube. For example, Polansky weaves the tube flat and joins two distinct layers of fabric together at the *selvedge edges*. The layers of Polansky's flat woven fabric are *blocked into a cylinder*. Column 4, lines 44-45; column 5, lines 28-34. One definition of selvedge is:

1a: the edge on either side of a woven or flat-knitted fabric so finished as to prevent raveling; *specifically*: a narrow border often of different or heavier threads than the fabric and sometimes in a different weave. b: an edge (as of fabric or paper) meant to be cut off and discarded. 2: a outer or peripheral part.

See Merriam-Webster Online. Furthermore, one definition of *block* is to shape on, with, or as if with a block. <*block* a hat.> *Id.* If Polansky were woven in a tube, there would be no selvedge edges to join or reason to separately shape into a tube. Therefore

Polansky's picks are woven flat into a fabric and that fabric is later shaped into a cylinder. Because Polansky does not teach windings per the Board's *Decision on Appeal*, Polansky neither teaches nor suggests the same. In view of these arguments, reconsideration of the rejection of claims 65-69, 75-79, and 81 is requested.

35 U.S.C. § 103(a) Rejections

The examiner rejected claims 70-73 under 35 U.S.C. § 103(a) as being unpatentable over Polansky (US 3,304,557) in view of Inoue (US 5,290,305). As explained above, Polansky fails to disclose windings. Thus, neither Polansky nor Inoue disclose all of the limitations of claim 70 alone or in combination.

Additionally, Inoue is not designed to be C-shaped once released from a catheter. For example, the frame of an artificial blood vessel may be used to expand a constricted part of a human organ by the resilient restoring force of the frame. Column 12, line 57-column 13, line 16. As shown in Figures 30-32, the frame is sufficiently stiff so as to have circular, fully expanded rings *in vivo* to expand a constriction. This, taken together with the fact that neither Polansky nor Inoue are dimensioned to resiliently engage a first human blood vessel in a C-shaped deformed configuration leads to the conclusion that neither reference alone nor in combination is designed to do what the applicant has done. In other words, neither reference teaches or suggests an annular resilient element that is adapted to be situated inside a body passage in a C-shaped deformed configuration as one example.

In an embodiment of the present invention, the number of windings, the diameter of the wire that forms the windings, and the diameter of the annular element may determine a desired bendability (*e.g.*, bending diameter), clamping force, and C-shape *in vivo* of the clamping ring. Accordingly, the ring may have several advantages such as enabling a graft to be positioned in a blood vessel such that a portion of the graft is both proximal and distal to an intersecting blood vessel without occluding blood flow. *See, e.g.*, Figures 4 and 5. Neither Polansky nor Inoue are so adapted.

The examiner rejected claim 32 under 35 U.S.C. § 103(a) as being unpatentable over Marcade (US 5,676,696) in view of Palmaz et al. (US 5,316,023). Prior arguments with respect to the patentability of claim 32 are incorporated and reasserted herein.

New claim 82 is patentable for all of the reasons stated above and previously discussed in the prior response.

MISCELLANEOUS***Support for Amendments to the Claims***

Support for the amendment to claims 70, 75, and 82 may be found in the specification at least at page 8, line 9-page 9, line 23; page 10, line 24-page 11, line 25; Figures 1, 2, 4, and 5, without limitation to a specific embodiment of the invention. For example, as shown in Figure 1, the ring 30 may be folded along its diametric axis "B." Specification, lines 14-15. As a result, loops 38 may extend proximally relative to points along the diametric axis of folding. Specification, page 8, lines 9-29; page 10, lines 24-33. As shown in Figures 2, 4, and 5, in some instances the ring 30 may be positioned inside a body passage in a C-shaped configuration while making continuous contact with the internal vessel wall. Specification, page 8, lines 25-29; page 10, lines 24-33. In one embodiment, the C-shaped ring 30 may be positioned within the abdominal aorta proximate to the left and right renal arteries 50 and 52. *Id.* See also Figures 4 and 5. In an embodiment, at least a portion of the loops 38 may extend past the renal arteries and a portion 53 may be located just distally of the openings to the arteries. *Id.*

Copending Applications

The examiner is requested to please refer to the list of copending applications and claims previously submitted on or about December 1, 2005 in the Response to Office Communication mailed on November 1, 2005.

CONCLUSION

In view of the amendments and remarks herein, the application is in condition for allowance. The examiner's prompt action in accordance therewith is respectfully requested. The commissioner is authorized to charge any additional fees, including extension of time fees, or credit any overpayment to Deposit Account No. 20-1504 (VAS.0002US).

Respectfully submitted,

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Rhonda L. Sheldon, Reg. No. 50, 457
TROP, PRUNER and HU, P.C.
8554 Katy Freeway, Suite 100
Houston, TX 77024
Phone: 713-468-8880
Fax: 713-468-8883